

PANDEMIS, Hb.

698. *Pandemis ribeana*, Hb.

Tortrix (Pandemis) ribeana, Stgr. & Wk. Cat. Lp. Eur. 236. No. 698 (1871).

Tortrix (Pandemis) cerasana, Stgr. & Wk. Cat. Lp. Eur. 236. No. 699 (1871).

 $\beta.$ *ribeana*, Hb. + *cerasana*, Hb.

Hab. EUROPE. KASHMIR—Scinde Valley, 7000 feet, VI. 1887 (Leech).

701. *Pandemis heparana*, Schiff.

Tortrix (Pandemis) heparana, Stgr. & Wk. Cat. Lp. Eur. 236. No. 701 (1871).

Hab. EUROPE. COREA—Gensan, VI. 1886 (Leech). CHINA—Omei Shan, VI.—VII.; Che-tou, 12,000 feet, VI.—VII. JAPAN (Pryer, 1886).

[To be continued.]

LII.—*Rhynchotal Notes*.—IV. Heteroptera: Pentatominae (part.). By W. L. DISTANT.

THE present contribution extends to the completion of the subfamily Pentatominae as contained in the British Museum, descriptions of more undescribed species forming the material of another paper elsewhere. Several references refer to Westwood's species described in the Hope Catalogues; all these types are now in my hands for revision, and the synoptic notes relating to them are only reserved for completion.

Genus OCHROPHARA.

Ochrophara corinna.

Pentatoma (?) *corinna*, Kirby, Journ. Linn. Soc., Zool. xxiv. p. 84, pl. iv. fig. 12 (1891).

Genus BRACHYMYNA.

Brachymna, Stål, Stett. ent. Zeit. xxii. p. 142 (1861).

Balsa, Walk. Cat. Het. ii. p. 410 (1867).

Brachymna tenuis.

Brachymna tenuis, Stål, Stett. ent. Zeit. xxii. p. 142 (1861).

Balsa extenuata, Walk. Cat. Het. ii. p. 410. n. 1 (1867).

Genus THOLOSANUS.

Tholosanus? colligata.

Pentatoma colligata, Walk. Cat. Het. ii. p. 310. n. 149 (1867).

I have placed this species doubtfully, or, rather, provisionally, in my genus *Tholosanus*, from which it differs by the broad and less attenuated scutellum. The type and only specimen has the antennae mutilated, and thus exact generic identification is impossible.

Genus PLEXIPPUS.

Plexippus fulvescens.

Rhaphigaster fulvescens, Dall. List Hem. i. p. 238. n. 27 (1851).

Dallas's type and only representative was unlocalized; in Dr. Atkinson's Indian collection, now in the British Museum, are specimens from Mungphu and Utakamand.

Sikkim (Coll. Dist.).

Plexippus affinis, sp. n.

Dull ochraceous, thickly and darkly punctate, the coloration distinctly darker on the head and anterior half of pronotum; body beneath and legs very pale ochraceous; abdominal stigmatal spots black, a castaneous spot on apical segment. Abdomen above reddish ochraceous, the apical area violaceous; connexivum darkly punctate, with small black marginal spots at incisures.

Antennæ fuscous, apical joint ochraceous, apices of fourth and fifth joints piceous, second joint much shorter than the third, third and fourth joints subequal in length; pronotum with the lateral margins distinctly piceous, the anterior-lateral and anterior margins narrowly ochraceous. Rostrum reaching the posterior coxae.

Long. 11 millim.; exp. pronot. angl. $6\frac{1}{2}$ millim.

Hab. Continental India, Sikkim (Atkinson Coll.: Brit. Mus.). Naga Hills, W. Yunan (Coll. Dist.).

The greater length of the rostrum and the shorter second joint of the antennæ are not congeneric characters, but scarcely warrant at present the formation of a new genus.

Genus DICTYOTUS.

Dictyotus æqualis.

Pentatoma æqualis, Walk. Cat. Het. ii. p. 310. n. 150 (1867).

Dictyotus Roei, Dall. (nec Westw.) List Hem. i. p. 140, pl. iii. fig. 4 (1851); Dist. Ann. & Mag. Nat. Hist. ser. 7, vol. iv. p. 434 (1899).

Since publishing my note on this species (*supra*) I have examined Westwood's type, and find it is quite distinct from the species identified by Dallas in the British Museum collection as *D. Roei*. Walker's name therefore now stands, though he described the species in a wrong genus and irrespective of it being represented by a series in Westwood's name and under the genus *Dictyotus*.

Dictyotus detersus.

Mormidea detersa, Walk. Cat. Het. iii. p. 554 (1868).

Somewhat the shape and form of *D. similis*, Dall. *Dictyotus* requires revision; all the species which Dallas included in his genus do not appear to be congeneric.

Genus EURINOME.

Eurinome inconspicua.

Pentatoma inconspicua, Montrouz. Ann. Soc. Linn. Lyon, (2) v. p. 249 (1858).

Pentatoma circumdata, Walk. Cat. Het. ii. p. 307. n. 137 (1867).

Eurinome marginalis.

Pentatoma marginalis, Walk. Cat. Het. ii. p. 306. n. 136 (1867).

Pentatoma submarginalis, Tryon, Ann. Queensl. Mus. ii. p. 16 (1892).

Mr. Tryon's description exactly represents Walker's type. Walker's description of this species is more than usually careless and incomplete.

Genus PERIBALUS.

Peribalus dubius.

Pentatoma? dubia, Dall. List Hem. i. p. 237. n. 10 (1851).

Peribalus abbreviatus.

Holcostethus abbreviatus, Uhler, U.S. Geol. Surv. Montana, 1872, p. 397.

Genus TOLUMNIA.

*Tolumnia aeola.**Pentatoma aeola*, Dall. List Hem. i. p. 248. n. 38 (1851).

Second joint of antennæ slightly longer than the third, apical margin of corium slightly concave. Other characters generally as in *Tolumnia*.

Genus TIBRACA.

*Tibraca limbaticentrata.**Tibraca limbaticentrata*, Stål, Bidr. till Rio-Jan. i. p. 19 (1858).*Mormidea basalis*, Walk. Cat. Het. iii. p. 553 (1868).*Mormidea Walkeri*, Leth. & Sov. Cat. Gén. Hém. t. i. p. 124 (1893).*Tibraca basalis*, Dist. Ann. & Mag. Nat. Hist. ser. 7, vol. iv. p. 438 (1899).

Since placing Walker's species in the genus *Tibraca* (*supra*) I have examined Stål's type of *T. limbaticentrata*, and find them both conspecific.

Genus EYSARCORIS.

*Eysarcoris subarmata.**Hoplistodera armata*, Walk. Cat. Het. ii. p. 266. n. 7 (1867).

Closely allied to *E. guttigera*, Thunb. Scutellum a little longer, pronotal angles very slightly more produced.

*Eysarcoris? insurgens.**Hoplistodera insurgens*, Walk. Cat. Het. ii. p. 265. n. 5 (1867).

This species has the pronotal angles prominently and acutely produced and directed slightly forward. Excluding this character it is allied to *E. guttigera*, Thunb.

*Eysarcoris? aenescens.**Hoplistodera aenescens*, Walk. Cat. Het. ii. p. 266. n. 6 (1867).

Very closely allied to the preceding species, but differing by having the apices of the pronotal angles slightly recurved.

Eysarcoris alienus, Walk. Cat. Het. ii. p. 275. n. 15 (1867).

This species is founded on a single specimen without abdomen. Walker describes the sternal process, which "is forked hindward," but proceeds to remark that "it differs somewhat from the typical form of *Eysarcoris*, but hardly sufficient to

constitute a new genus." As far as can be predicated in its mutilated condition, it seems to be very closely allied to the genus *Brachystethus*.

Genus BRACHYNEMA.

Brachynema biplaga.

Rhaphigaster biplaga, Walk. Cat. Het. ii. p. 373. n. 94 (1867).

Pentatoma? tetrastigma, Walk. (nec Herr.-Schäff.) loc. cit. p. 311. n. 154.

Walker's type, and also the second specimen he identified as *P. tetrastigma*, Herr.-Schäff., were unlocalized. The British Museum now possesses specimens from the Atkinson collection which are labelled "Gulistan," Afghanistan.

Genus THYANTA.

Thyanta parvula.

Rhaphigaster parvulus, Dall. List Hem. i. p. 279. n. 16 (1851).

The type and sole representative of this species is unlocalized, but seems clearly to belong to the genus *Thyanta*.

Genus AFRANIA.

Afrania, Stål, Hem. Afr. i. p. 180 (1864).

Sala, Walk. Cat. Het. ii. p. 404 (1867).

Afrania Wahlbergi.

Strachia Wahlbergi, Stål, (Efv. Vet.-Ak. Förh. 1853, p. 220.

Sala colorata, Walk. Cat. Het. ii. p. 405. n. 1 (1867).

Afrania exigua.

Sala exigua, Walk. Cat. Het. iii. p. 575 (1868).

Genus EURYDEMA.

Eurydema rugosa.

Eurydema rugosa, Motsch. Étud. x. p. 22 (1861); Dist. Ann. & Mag. Nat. Hist. (5) viii. p. 28 (1881).

Tropicoris rugosus, Leth. & Sev. Cat. Gén. Hém. t. i. p. 183 (1893) (nec Dist.).

Genus STENOZYGUM.

Stenozygum gemmea.

Strachia gemmea, Walk. Cat. Het. ii. p. 346. n. 93 (1867).

Strachia lepida, Walk. loc. cit. p. 347. n. 94.

Strachia sanguinegnattatum, Voll. Versl. Ak. Amst. Nat. (2) ii. p. 185 (1868).

Stenozygum speciosum.

Strachia speciosa, Dall. List Hem. i. p. 261, n. 10 (1851).
Strachia ornata, Walk. Cat. Het. ii. p. 331, n. 66 (1867).

Genus AROCERA.

Arocera placens.

Strachia placens, Walk. Cat. Het. ii. p. 316, n. 21 (1867).

Genus VULSIREA.

Vulsirea violacea.

Cimex violaceus, Fabr. Syst. Rhynch. p. 167, n. 63 (1803); Herr.-Schäffl. Wanz. Ins. iv. p. 89, fig. 425 (1839).
Vulsirea superba, Walk. Cat. Het. ii. p. 354, n. 9 (1867).

Genus ANAXILAUS.

Anaxilaus camatulus.

Pentatoma camatula, Dall. List Hem. i. p. 237 (1851).

Anaxilaus vesiculosus.

Cimex vesiculosus, Herr.-Schäffl. Wanz. Ins. v. p. 65, fig. 509 (1839).
 Australia, Adelaide. (Three specimens, Brit. Mus.)
 This is not synonymous with the above as catalogued by Lethierry and Severin, but quite distinct (*cf.* Bergroth, Rev. d'Ent. t. x. pp. 206-7, 1891).

Genus NOVATILLA.

Novatilla, Dist. Trans. Ent. Soc. Lond. 1888, p. 479.

Dr. Bergroth (Rev. d'Ent. t. x. p. 206, 1891) has stated that *Novatilla* "est identique au genre *Anaxilaus*, Stål." The two genera have, however, little in common, and the structure of the head is alone sufficient to separate them. Stål founded his genus *Anaxilaus* on the *Pentatoma camatula*, Dall. This statement by Bergroth has been accepted by Lethierry and Severin in their 'Cat. Gén. Hémiptères.'

Novatilla fasciata.

Novatilla fasciata, Dist. Trans. Ent. Soc. Lond. 1888, p. 480, pl. xiii. fig. 2.

Anaxilaus fasciata, Bergr. Rev. d'Ent. t. x. p. 206 (1891); Leth. & Sev. Cat. Gén. Hém. t. i. p. 164 (1893).

*Novatilla virgata.**Pentatomia virgata*, Dall. List Hem. i. p. 249 (1851).*Novatilla virgata*, Dist. Trans. Ent. Soc. Lond. 1888, p. 480.*Anaxilaus virgata*, Leth. & Sev. Cat. Gén. Hém. t. i. p. 164 (1893).? *Novatilla Barnardi.**Anaxilaus Barnardi*, Berggr. Rev. d'Ent. t. x. p. 205 (1891).

This species probably belongs to *Novatilla*, as Dr. Bergroth describes it as "*A. fasciato*, Dist., affine, sed notis allatis facile distinctum."

Genus NEZARA.

*Nezara Dallasi.**Rhaphigaster marginatus*, Dall. List Hem. i. p. 277. n. 8 (1851) (nom. præocc.).*Nezara naspirus.**Rhaphigaster naspirus*, Dall. List Hem. i. p. 276. n. 6 (1851).*Nezara rinapsus.**Rhaphigaster rinapsus*, Dall. List Hem. i. p. 277. n. 7 (1851).*Menida rinapsus*, Leth. & Sev. Cat. Gén. Hém. t. i. p. 175 (1893).*Nezara stictica.**Rhaphigaster sticticus*, Dall. List Hem. i. p. 281. n. 22 (1851).*Pentatoma aspersa*, Walk. Cat. Het. ii. p. 292. n. 53 (1867).*Nezara viridula.**Cimex viridulus*, Linn. Syst. Nat. ed. x. p. 444 (1758).*Cimex torquatus*, Fabr. Syst. Ent. p. 710 (1775).*Pentatoma vicaria*, Walk. Cat. Het. ii. p. 303. n. 122 (1867).*Nezara parnisanus.**Rhaphigaster parnisanus*, Dall. List Hem. i. p. 279. n. 14 (1851).*Nezara prunensis.**Rhaphigaster prunensis*, Dall. List Hem. i. p. 279. n. 15 (1851).*Nezara marginalis.**Pentatoma marginale*, Herr.-Schäff. Wanz. Ins. iii. p. 95, t. civ. fig. 320 (1836).*Strachia olivacea*, Walk. Cat. Het. ii. p. 322. n. 40 (1867).*Arocera olivacca*, Leth. & Sev. Cat. Gén. Hém. t. i. p. 159 (1893).

*Nezara gravis.**Strachia gravis*, Walk. Cat. Het. ii. p. 322. n. 39 (1867).Allied to *N. marginalis*, H.-Seh.*Nezara chloris.**Pentatoma chloris*, Westw. in Hope Cat. i. p. 38 (1837).*Pentatoma mentiens*, Walk. Cat. Het. ii. p. 296. n. 92 (1867).

Genus BANASA.

*Banasa varians.**Rhaphigaster dimidiatus*, Stål, Bidr. till Rio-Jan. i. p. 22 (1858).*Banasa varians*, Stål, Enum. Hem. ii. p. 43 (1872).*Pentatoma subrufescens*, Walk. Cat. Het. ii. p. 290. n. 50 (1867).*Banasa inopinata.**Rhaphigaster inopinatus*, Walk. Cat. Het. ii. p. 358. n. 18 (1867).

Lethierry and Severin (Cat. Gén. Hém. t. i. p. 166) have queried this species as a synonym of *Nezara sparnia*, Dall., probably misled by Walker having differentially referred to that species, with which, however, it has nothing in common.

Genus PALLANTIA.

*Pallantia macula.**Rhaphigaster macula*, Dall. List Hem. i. p. 284. n. 32 (1851).*Pentatoma diffusa*, Walk. Cat. Het. ii. p. 290. n. 49 (1867).

Genus SABEUS.

*Sabaeus spinosus.**Rhaphigaster spinosus*, Dall. List Hem. i. p. 278. n. 10 (1851).*Sabaeus spinosus* (part.), Leth. & Sev. Cat. Gén. Hém. t. i. p. 168 (1893).*Mormidea ductor*, Walk. Cat. Het. ii. p. 264. n. 64 (1867).*Sabaeus humeralis.**Rhaphigaster humeralis*, Dall. List Hem. i. p. 278. n. 11 (1851).*Sabaeus spinosus* (part.), Leth. & Sev. Cat. Gén. Hém. t. i. p. 168 (1893).*Cuspicona smaragdina*, Walk. Cat. Het. ii. p. 380. n. 7 (1867).

Lethierry and Severin (*supra*) have regarded these two species as being synonymous. In *S. spinosus* the pronotal spines are slightly reenerved backward; in *S. humeralis* they are directed moderately forward and somewhat upward. In all the specimens of this species which I have examined the reddish spot is present at the base of these spines.

Genus HYLLUS.

Hyllus fasciatus, sp. n.

Olivaceous green; head and a broad fascia between and occupying the humeral angles of the pronotum dark ochraceous; a pale greenish rounded spot at apex of scutellum; body beneath and legs greenish; pronotal angles beneath reddish ochraceous, with their margins and apex black; disk of abdomen ochraceous. Antennæ greenish ochraceous, second joint shorter than the third, fourth and fifth joints subequal in length. Pronotal angles robust, slightly recurved, their apices and lateral margins black.

Long. $9\frac{1}{2}$ millim.; exp. pronot. angl. 8 millim.

Hab. Ceylon (*Green*: Brit. Mus.).

Allied to *H. florens*, Walk., differing by the more robust and recurved pronotal spines, fasciate pronotum, &c.

Genus PLAUTIA.

Plautia prolata.

Pentatoma prolata, Walk. Cat. Het. ii. p. 306, n. 135 (1867).

Plautia discolor.

Pentatoma discolor, Walk. Cat. Het. ii. p. 305, n. 134 (1867).

Plautia fimbriata.

Cimex fimbriatus, Fabr. Ent. Syst. iv. p. 121, n. 159 (1794).

Rhaphigaster rufoviridis, Walk. Cat. Het. ii. p. 364, n. 57 (1867).

Plautia grossepunctata.

Pentatoma grossepunctata, Kirby, in Andrews, Monogr. Christmas Isld. p. 128, pl. xv. fig. 2 (1900).

Genus ZANGIS.

Zangis impar.

Rhaphigaster impar, Walk. Cat. Het. ii. p. 374, n. 96 (1867).

Rhaphigaster Ludekingii, Voll. Versl. Ak. Amst. Nat. (2) ii. p. 187 (1868).

Walker's type was unlocalized. I possess a specimen from Sumatra collected by Mr. Forbes, and this habitat agrees with that of Vollenhoven's typical specimens.

Zangis varicornis.

Rhaphigaster varicornis, Dall. List Hem. i. p. 281, n. 20 (1851).

*Zangis subpunctata.**Pentatoma subpunctata*, Walk. Cat. Het. ii. p. 307, n. 138 (1867).*Rhaphigaster melanostictus*, Voll. Versl. Ak. Amst. Nat. (2) ii. p. 187 (1868).

Walker, in his description, has made no mention of a small black spot on each lateral margin of the scutellum a little before its apex.

Genus ASTYANAX.

*Astyanax subactus.**Hoplistodera subacta*, Walk. Cat. Het. ii. p. 267, n. 8 (1867).

Genus ANTESTIA.

*Antestia anchora.**Cimex anchora*, Thunb. Nov. Ins. Sp. ii. p. 47, pl. ii. fig. 60 (1783).*Strachia pardalis*, Walk. Cat. Het. ii. p. 330, n. 64 (1867).*Strachia platyspila*, Walk. loc. cit. p. 337, n. 78.*Antestia pulchra.**Pentatoma pulchra*, Dall. List Hem. i. p. 253 (1851).*Strachia heterospila*, Walk. Cat. Het. ii. p. 331, n. 65 (1867).*Antestia partita.**Strachia partita*, Walk. Cat. Het. ii. p. 334, n. 74 (1867).*Strachia subcostatis*, Walk. loc. cit. p. 335, n. 75.*Strachia semirividis*, Walk. loc. cit. p. 336, n. 76.*Pentatoma plebeja*, Voll. Versl. Ak. Amst. Nat. (2) ii. p. 185 (1868).

Apparently a variable and widely spread species throughout the Malay Archipelago. I possess examples from Port Moresby which cannot be distinguished from typical Javan forms described by Vollenhoven as *P. plebeja*.

*Antestia polyspila.**Strachia polyspila*, Walk. Cat. Het. ii. p. 336, n. 77 (1867).Allied to *A. securigera*, Walk.*Antestia degenera.**Pentatoma degenera*, Walk. Cat. Het. ii. p. 304, n. 132 (1867).*Pentatoma punctatissima*, Kirby, Journ. Linn. Soc., Zool. xxiv. p. 83 (1891).*Antestia variegata.**Cimex variegatus*, Thunb. Nov. Ins. Sp. ii. p. 48, pl. ii. fig. 62 (1783).Var. *Cimex olivaceus*, Thunb. Hem. rostr. Cap. ii. p. 2 (1822).*Strachia pentatomoides*, Walk. Cat. Het. ii. p. 325, n. 51 (1867).

Genus MENIDA.

*Menida histrio.**Cimex histrio*, Fabr. Mant. ii. p. 296. n. 176 (1787).*Rhaphigaster strachiooides*, Walk. Cat. Het. ii. p. 365. n. 63 (1867).*Menida apicalis.**Rhaphigaster apicalis*, Dall. List Hem. i. p. 285 (1851).*Menida megaspila.**Antestia megaspila*, Walk. Cat. Het. iii. p. 559 (1868).Scutellum very broad—*Menida*?*Menida labecula*, sp. n.

Ochraceous, thickly, coarsely, brownly punctate. Head with the lateral and basal margins and the margins of the central lobe piceous. Pronotum with two transverse foveate spots on anterior area. Scutellum with a large discal castaneous spot near base and two smaller spots of the same colour near apex, behind which is a smaller linear spot; apex paler and less punctate. Connexivum ochraceous, spotted with castaneous. Body beneath and legs ochraceous, lateral margins and apical segment of abdomen castaneous; a cluster of black punctures near anterior coxae and some silky piceous transverse patches on lateral areas of meso- and metasternum. Antennæ ochraceous, second joint a little shorter than third, apical joints sometimes castaneous.

Long. 5 millim.

Hab. Ceylon (Green: Brit. Mus. Lewis: Coll. Dist.).

A short and broad species allied to *M. distincta*, Dist.*Menida paecila.**Rhaphigaster paecilus*, Dall. List Hem. i. p. 287. n. 38 (1851); Leth. & Sev. Cat. Gén. Hém. t. i. p. 200 (1893).Closely allied to *M. lythrodes*, Germ.*Menida pallipes.**Rhaphigaster pallipes*, Dall. List Hem. i. p. 287. n. 39 (1851); Leth. & Sev. Cat. Gén. Hém. t. i. p. 200 (1893).

Lethierry and Severin, in their most useful catalogue, remark (*Antestia*, sec. Distant). Some confusion must have arisen. The *Antestia pallipes*, Dall., = *Pentatoma pallipes*, Dall. List Hem. i. p. 239. n. 17 (1851).

Menida bisignata.

Rhaphigaster bisignatus, Walk. Cat. Het. ii. p. 366 (1867).

Menida discoidalis.

Rhaphigaster discoidalis, Walk. Cat. Het. iii. p. 568 (1868).

Menida indecora.

Rhaphigaster indecorus, Walk. Cat. Het. iii. p. 568 (1868).

Menida continuus.

Rhaphigaster continuus, Walk. Cat. Het. ii. p. 368. n. 76 (1867).

Var. *Rhaphigaster interruptus*, Walk. loc. cit. p. 369. n. 77.

Menida rubriplaga.

Rhaphigaster rubriplaga, Walk. Cat. Het. ii. p. 365. n. 64 (1867).

Menida leucophaea.

Antestia leucophaea, Walk. Cat. Het. ii. p. 281. n. 19 (1867).

[To be continued.]

LIII.—*Description of a new Cetoniid Beetle from East Africa.* By E. A. HEATH, M.D., F.L.S.

Golianthus (Sphyrorrhina) Wisei.

Shining black. Thorax septangular in shape and very coarsely and thickly punctured, with three narrow ochraceous longitudinal lines, the central line being faintly continued through the scutellum. The anterior part of pronotum is slightly raised to a point, on each side of which are two small ochraceous spots, one at base of head, the other on disk a little before centre. The head is anteriorly prolonged into a square frontal horn-like process 5 lines in width and 4 lines from front to base, its anterior angles terminating in a spine. The anterior horn is about 9 lines in length and granularly rugose, broad at its base (about $3\frac{1}{2}$ lines). It is triangular in shape, rising abruptly from the head to a height of about 3 lines, then convexly depressed to its apex for 6 lines. It gradually lessens in size to the apex, which is terminated by a cruciform process with its angles curved backward, the horn forming a bridge-like structure over the horn-like clypeus.